APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,139	06/21/2001	Friedrich Mueller	449122005700	9013

			EXAMINER
25227	7590	09/01/2006	HARPER, V PAUL

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ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/831,139	MUELLER, FRIEDRICH
	Examiner	Art Unit	
	V. Paul Harper	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 August 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>11-14</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>11-14</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1.　　Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Haavisto et al. (U.S. Patent 5,864,603), hereinafter referred to as Haavisto.

Regarding **claim 11**, Haavisto discloses an apparatus for controlling a telephone

with voice commands. Haavisto's apparatus includes the following:

- a speech recognition device configured to recognize acoustic objects, where the

acoustic objects comprise at least one of individual letters, combinations of letters or

control commands (col. 4, lines 23-27; Figs. 1-3 indicates various states during the

speech recognition; col. 6, describes various commands that are recognized: "Cancel,"

"Yes," "No"); and

- an acoustic device for acoustic output or optical display of recognized acoustic

objects (col. 6, lines 23-45, responds "Was the number"), wherein

- if an acoustic object is incorrectly recognized, the speech recognition device

subsequently recognizes a first control command causes a speech recognition

algorithm to expect repeated utterance of the incorrectly recognized object (col. 6, line

33-57, answers "No" where the phone will go into state voice control; if the recognition

failed …. The phone responds "Number again, please"), and

- a second control command causes the speech recognition algorithm to output at

least one further acoustic object (col. 6, line 33-57, the phone responds "Number again,

please").

Haavisto also describes the recognition of an acoustic object with multiple

possible matches associated with probabilities (col. 4, lines 10-23, multiple phone

numbers), but Haavisto does not specifically disclose (as part of a particular

embodiment) "a recognition probability of the at least one further acoustic object is less

than the recognition probability of the previously output acoustic object, but greater than

the recognition probability of other acoustic objects." However the examiner contends

that these concepts were well-known in the art as taught in the prior art section of

Haavisto.

Haavisto in the prior art section describes prior teachings where during the

recognition process several potential recognition objects are identified including a best

result, a next best result, etc. where the candidates are arranged in order (col. 2, lines

28-39; "if the user gives a negative answer …, the phone selects the result that is the

second best match to the recognition" and "as a response to a voice command … the

telephone indicates … the next best candidate, when the candidates have been

arranged in order").

Therefore, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to modify Haavisto by specifically providing the feature,

as taught by Haavisto's prior art, because it is well known in the art at the time of

invention as an improvement when selecting from several possible recognition results

(Haavisto, col. 2, line 27-32).

Regarding **claim 12**, Haavisto in view of Haavisto's prior art teaches everything

claimed, as applied above (see claim 11). In addition, Haavisto teaches "recognition of

a third control command causes the speech recognition algorithm to assess the last-

output object as correctly recognized, ends any output of further objects and/or triggers

a function corresponding to the recognized control command" (col. 6, lines 34-40; the

user may respond "Yes" …, there follows a transition to a state Dialing).

Regarding **claim 13**, Haavisto discloses method for controlling a telephone with

voice commands. Haavisto's method includes the following steps:

• providing a recognition algorithm to recognize acoustic objects, where the acoustic

objects comprise at least one of individual letters, combinations of letters or control

commands (col. 4, lines 23-27; Figs. 1-3 indicates states during the speech recognition;

col. 6, describes various commands that are recognized: "Cancel," "Yes," "No")and

• acoustically outputting or displaying recognized acoustic objects (col. 6, lines 23-45,

responds "Was the number"),

• wherein if an acoustic object is incorrectly recognized, the recognition algorithm

subsequently recognizes a first control command causes a speech recognition

algorithm to expect repeated utterance of the incorrectly recognized object (col. 6, line

33-57, answers "No" where the phone will go into state Voice control; if the recognition

failed .... The phone responds "Number again, please"), and

- a second control command causes the speech recognition algorithm to output at

least (col. 6, line 33-57, the phone responds "Number again").

Haavisto also describes the recognition of an acoustic object with multiple

possible matches as associated with a probabilities (col. 4, lines 10-23, multiple phone

numbers), but Haavisto does not specifically disclose (as part of a particular

embodiment) "one further acoustic object, wherein a recognition probability of the at

least one further acoustic object is less than the recognition probability of the previously

output acoustic object, but greater than the recognition probability of other acoustic

objects, or the further acoustic object is provided by a sequence of entries in a storage

device of the device." However the examiner contends that these concepts were well-

known in the art as taught in the prior art section of Haavisto.

Haavisto in the prior art section describes prior teachings where during the

recognition process several potential recognition objects are identified including a best

result, a next best result, etc. where the candidates are arranged in order (col. 2, lines

28-39; "if the user gives a negative answer ..., the phone selects the result that is the

second best match to the recognition" and "as a response to a voice command ... the

telephone indicates ... the next best candidate, when the candidates have been

arranged in order"; furthermore the recognition candidates will necessarily be stored in

memory during the recognition process).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Haavisto by specifically providing the feature, as taught by Haavisto's prior art, because it is well known in the art at the time of invention as an improvement in recognition accuracy when selecting from several possible recognition results (Haavisto, col. 2, line 27-32) and an increase in user satisfaction from the improved performance.

Regarding **claim 14**, Haavisto in view of Haavisto's prior art teaches everything claimed, as applied above (see claim 13). In addition, Haavisto teaches "the recognition of a third control command causes the speech recognition algorithm to assess the last-output object as correctly recognized, ends any output of further objects and/or triggers a function corresponding to the recognized control command" (col. 6, lines 34-40; the user may respond "Yes" ..., there follows a transition to a state Dialing).

Response to Arguments

2.   Applicant's arguments with respect to claims 11-14 have been considered but are moot in view of the new ground(s) of rejection.

Citation of Pertinent Art

3.   The following prior art made of record but not relied upon is considered pertinent to the applicant's disclosure:

- Rabiner et al. ("Fundamentals of Speech Recognition" Prentice Hall, 1993, pp. 51-52) teach speech recognition and the use of decision logic to determine the best matches of a test pattern.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Paul Harper whose telephone number is (571) 272-7605. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

8/28/2006

V. Paul Harper
Patent Examiner
Art Unit 2626